
THE EVOLUTION OF THE INDUSTRIAL ACTIVITY IN ROMANIA IN 2019 IN THE INTERNAL AND INTERNATIONAL CONTEXT

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Abstract

The industrial activity in our country remains the main activity that contributes to the realization of the Gross Domestic Product. Despite the fact that so far minimal efforts have been made regarding the harmonization and development of the industry, this branch of the national economy remains important for Romania because there are resources, there is a well-structured, well-developed workforce and, from this point of view, there are prospects for the activity to develop at a much more accentuated rate. In 2019, the industrial activity had a positive growth, both overall and structurally. Of course, there have been many drops too, but these take into account certain aspects. The index of industrial production shows at large the whole evolution both during this semester and compared with the activity of the previous year. There are some lags behind in terms of labor productivity, which has seen slight increases in some areas but in some other decreases. The turnover of the industry is relevant in that it highlights the volume of industrial production by total industry as well as in the extractive or processing industry. New orders in the industry are important because they show the rhythm and concern on the total and in some sectors of the way in which it is necessary to increase the production or to diminish it according to the needs materialized by the new orders that are being launched. Production prices have increased slightly or more, which means they have been influenced by a more alert process of inflation. The energy resources as well as the industrial production offered for export or the labor market in this field reveals how this branch of the national economy evolved during the period up to April 2019.

Keywords: *industry, labor productivity, turnover, industrial orders, industrial price index, primary energy*

JEL Classification: L70, O10, Q43

Introduction

This article followed a complex analysis of the industrial activity carried out during the first four months of 2019, compared with both the same period of the previous year and with the last period of last year. A number of indicators are highlighted, such as labor productivity, turnover indexes, value indices of new orders in the processing and extractive industry, prices of industrial production, their evolution, stage of primary energy resources, industrial goods or industrial production offered for export. and a number of other industry-specific labor market issues. All these aspects are analyzed synthetically, data are presented as well as graphical representations that suggest the way in which the industry has evolved as a whole, but also in a structural way.

Literature review

Anghel, Dumbravă, Dumitru and Marinescu (2019), Anghelache, Burea (2018) dealt with a number of aspects of the evolution of the Romanian industry. Anghelache, Samson and Stoica (2019), Anghelache, Anghel, Lilea, Burea and Avram analyzed EU industry policy. Anghelache (2018) carried out a comprehensive analysis of the evolution of the Romanian economy over the last hundred years. Bozbas (2008) studied alternative fuel solutions for motor in the EU. Herrendorf and Akos (2012) tried to identify the sectors that have a negative influence on the underdeveloped countries. Hoberg and Phillips (2016) studied product differences in network industries. Kahn and Mansur (2013) studied whether local energy prices and regulations influence the geographical concentration of employment. Lee, Shin, Stulz (2016) researched how to invest capital in the industry. Restuccia (2010) examined the EU regulations in the food industry.

Methodology, data, results and discussions

- The gross index of industrial production in April 2019 compared to the previous month, decreased by 9.5% due to decreases in the production and supply of electricity and heat, gas, hot water and air conditioning (-15.1%). The processing industry registered a decrease of (-9.2%), and the extractive industry closed with a reduction of (-0.7%).

On the main industrial groups there were decreases in all categories of goods, but the most affected were the capital goods industry (-14.5%), the energy industry (-12.4%), the durable goods industry decreased with -10.1%, the intermediate goods industry registered (-6.3%) and the current-use goods industry (-2.7%). Compared with April 2018, in April 2019, industrial production increased by 1.4%, as a result of the increases recorded by the

extractive industry (+ 7.8%) and the processing industry (+ 1.4%). The gross index of industrial production fell to the production and supply of electricity and heat, gas, hot water and air conditioning by (-1.4%).

Considering the main industrial groups, production increased in the intermediate goods industry (+ 6.7%) and the current-use goods industry (+ 2.8%), but decreased in the durable goods industry (-5.9%), the capital goods industry (-2.5%) and the energy industry (-0.5%).

In the first four months of 2019 compared to the same period in 2018, the gross index of industrial production increased by 0.8%, due to the increases recorded by the extractive industry (+ 2.2%) and the processing industry (+ 1.3%). In the field of electricity and heat production, gas, hot water and air conditioning the decrease was -2.4%.

By industrial groups, production increased for intermediate goods (+ 6.0%) and capital goods (+ 1.7%), but decreased for long-term goods (-7.2%), current-use goods (-4.0%) and the energy field (-2.1%).

- This indicator adjusted according to the number of working days decreased in April 2019 compared to March 2019 by 8.0% due to decreases in the production and supply of electricity and heat, gas, hot water and air conditioning (-15.0%) and the processing industry (-8.4%).

Industrial production indices

Table 1

		Aprilie 2019 față de: April 2019 as against:		- % -
		Martie 2019 March 2019	Aprilie 2018 April 2018	1.1-30.IV.2019 față de/ as against 1.1-30.IV. 2018
Industrie - total	B	90,5	101,4	100,8
Industry	C	92,0	99,5	100,7
	S	101,1	100,4	101,0
- pe secțiuni / by sections:				
	B	99,3	107,8	102,2
Industria extractivă / Mining and quarrying	C	99,4	107,4	102,1
	S	104,8	107,1	102,2
	B	90,8	101,4	101,3
Industria prelucrătoare / Manufacturing	C	91,6	99,5	101,6
	S	100,8	100,5	101,9
	B	84,9	98,6	97,6
Energie electrică și termică / Electric and thermal energy	C	85,0	98,0	97,6
	S	100,5	98,5	97,6
- pe marile grupe industriale / by main industrial groups:				
	B	93,7	106,7	106,0
Industria bunurilor intermediare / Intermediate goods industry	C	94,1	104,8	105,9
	S	98,8	105,2	106,0
	B	85,5	97,5	101,7
Industria bunurilor de capital / Capital goods industry	C	87,6	95,6	101,7
	S	96,6	96,3	101,9
	B	89,9	94,1	92,8
Industria bunurilor de folosință îndelungată / Durable goods industry	C	94,4	91,9	92,8
	S	103,6	94,3	94,0
	B	97,3	102,8	98,0
Industria bunurilor de uz curent / Current use goods industry	C	99,4	99,0	95,7
	S	104,2	99,1	95,7
	B	87,6	99,5	97,9
Industria energetică / Energy industry	C	87,6	98,9	97,9
	S	100,9	99,5	98,1

B = gross series

C = adjusted series according to the number of working days

S = adjusted series according to the number of working days and of seasonality

Source: National Institute of Statistics

Production fell to the main categories of goods. The capital goods industry as well as the energy industry decreased by -12.4%, intermediate goods fell by 5.9%, long-term goods decreased by -5.6%.

In April 2019, the adjusted index of industrial production decreased by 0.5%, compared to April 2018. The production and supply of electricity and heat, gas, hot water and air conditioning and the manufacturing industry decreased by (-2, 0%), respectively (-0.5%). Only in the extractive field, the adjusted index increased by 7.4%.

By industrial groups, production decreased for long-term goods (-8.1%), capital goods (-4.4%), energy (-1.1%) and current-use goods (-1.0%). The intermediate goods industry grew by 4.8%.

In the first four months of 2019 compared to the same period of 2018, the adjusted index of industrial production was higher by 0.7%, growth determined by the extractive industry (+ 2.1%) and the processing industry

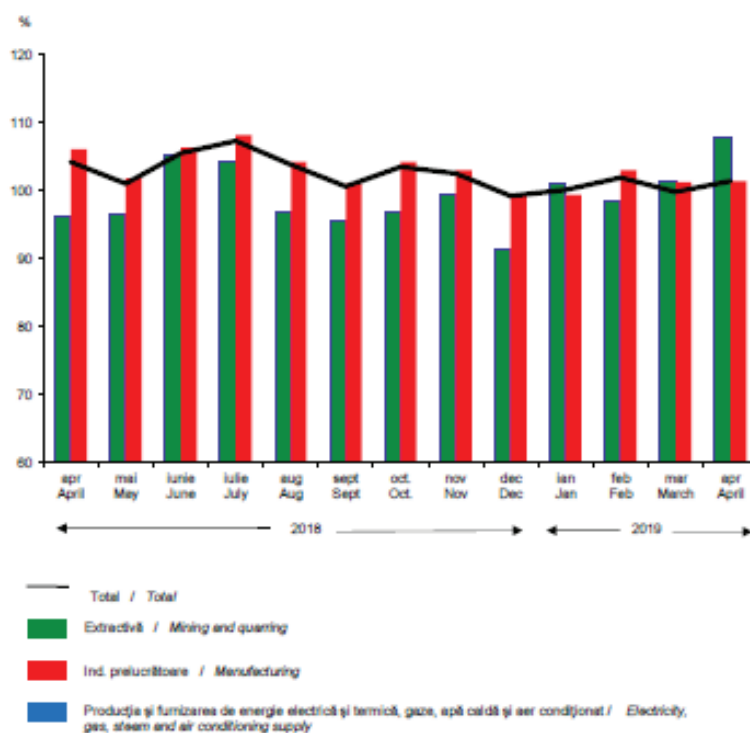
(+1.6 %). The production and supply of electricity and heat, gas, hot water and air conditioning decreased by 2.4%.

By industrial groups, production increased to intermediate goods (+ 5.9%) and capital goods (+ 1.7%). This decreased in the field of durable goods (-7.2%), current-use goods (-4.3%) and energy (-2.1%).

In the figure no. 1 graphically presents the data on the evolution of the industrial production index in the first four months of the two compared years.

Industrial production indices between April 2018 - April 2019 (gross series), corresponding month of the previous year = 100

Figure 1



Source: National Institute of Statistics

• The evolution of the labor productivity index in the industry

In April 2019, compared to the previous month, labor productivity decreased (-9.2%), due to the decrease of the production and supply of electricity and heat, gas, hot water and air conditioning (-15.3%). In the processing industry there was a decrease of -8.8% and in the extractive one (-1.8%).

By industrial groups, labor productivity decreased for all categories of goods: capital (-13.9%), energy industry (-12.6%), durable goods (-9.6%), intermediate goods (-6.3%) and goods for current use (-2.3%).

Compared to the same month of 2018, in April 2019 the productivity of labor in the industry increased by 2.0%, due to the growth of the extractive industry (+6.9%) and the processing industry (+2.1%).

Labor productivity decreased in the field of electricity and heat, gas, hot water and air conditioning (-0.1%). By industrial groups, it grew in the fields of intermediate goods (+4.4%), current-use goods (+3.7%) and energy (+1.6%). Labor productivity decreased in the production of durable goods (-2.9%) and capital goods (-0.1%).

Over the same four-month period (January-April) in 2019 and 2018, labor productivity increased by 1.3% as a result of the growth of the extractive industry (+2.3%) and the processing industry (+1.8%). With regard to the production and supply of electricity and heat, gas, hot water and air conditioning, labor productivity decreased (-1.1%). The large industrial groups registered increases in the production of capital goods (+4.3%), intermediate goods (+3.2%) and the energy industry (+0.4%). Decreases were recorded in the durable goods industry (-4.7%) and the current-use goods industry (-3.1%).

• The evolution of the turnover indexes in the industry

In April 2019, compared to March 2019, the total turnover (internal market and external market) of companies with industrial profile decreased by 4.7%, as a result of decreases in the extractive industry (-18.3%) and industry manufacturing (-4.3%). By industrial groups, it decreased in the field of production of capital goods (-7.6%), intermediate goods (-6.9%), durable goods (-1.3%) and the energy industry (-0.6%). It has grown in the consumer goods industry (+2.6%). During the same period of 2019 and 2018 (April), the value index of the total turnover (internal and external market) of the profile units was higher by 9.7%, due to increases in the manufacturing industry (+9.9%) and the extractive industry (+5.0%).

By activity groups, the turnover increased in all categories of goods: durable goods (+11.3%), capital goods (+10.9%), intermediate goods (+9.6%), goods for current use (+8.7%) and the energy industry (+7.1%).

Compared to the two time periods of 2019 and 2018, the value index of the total turnover (internal market and external market) of industrial units was higher by 7.4%, as a result of increases in the extractive industry (+11.3%) and from the processing industry (+7.3%).

In the table no. 2 and figure no. 2 are presented graphically the data regarding the indices of the turnover value.

Indices of the turnover of the industry

Table 2

Indicii valoricii al cifrei de afaceri din Industrie Turnover value indices in industry			
- % -			
	Aprilie 2018 față de: April 2018 as against:		1.1-30.IV.2018 față de/ as against 1.1-30.IV. 2018
	Martie 2018 March 2018	Aprilie 2018 April 2018	
Industria - total / Industry	95,3	109,7	107,4
- pe secțiuni / by sections			
Industria extractivă / Mining and quarrying	81,7	105,0	111,3
Industria prelucrătoare / Manufacturing	95,7	109,9	107,3
- pe marile grupe industriale / by main industrial groups:			
Industria bunurilor intermediare / Intermediate goods industry	93,1	109,6	111,5
Industria bunurilor de capital / Capital goods industry	92,4	110,9	106,7
Industria bunurilor de folosință îndelungată / Durable goods industry	98,7	111,3	105,2
Industria bunurilor de uz curent / Current use goods industry	102,6	108,7	104,2
Industria energetică / Energy industry	99,4	107,1	103,8

Source: National Institute of Statistics

By industrial groups, the total turnover had the following evolution: intermediate goods (+ 11.5%), capital goods (+ 6.7%), durable goods (+ 5.2%), current use goods (+ 4.2%) and the energy industry (+ 3.8%).

Value indexes of the turnover of the industry during the period April 2018 - April 2019 (corresponding month of the previous year = 100)

Figure 2



Source: National Institute of Statistics

• **The evolution of the value indices of the new orders in the manufacturing industry**

The value index of new orders in the field of processing that work on the basis of total orders (internal market and external market) was in April 2019 3.4% higher than the previous month. By industrial groups, the value indices of the new orders increased in the durable goods industry (+ 15.0%) and the capital goods industry (+ 11.5%), but decreased in the field of intermediate production (-10.9%) and for current-use goods (-4.0%).

Compared with April 2018, in April 2019, the value index of new orders from the manufacturing industry branches that work on the basis of total orders (internal and external market) increased by 13.3%.

By industrial groups, the value index of new orders increased in the field of durable goods (+ 25.3%), capital goods (+ 19.8%), current-use goods (+ 10.3%) and intermediate goods (+ 0.2%).

During the four months of the two years, the value index of the new

orders from the branches of the processing industry working on orders, on the total (internal and external market) increased by 7.6%.

By groups, the value index of new orders increased in all categories of goods: durable goods (+ 10.6%), capital goods (+ 9.5%), intermediate goods (+ 4.5%) and goods for current use (+ 4.1%).

• **The modification of industrial production price indices**

In April 2019, compared to March, the prices of industrial production increased by 0.6%.

The prices increased in the extractive industry (+ 1.2%), the processing industry (+ 0.8%) and the water distribution; sanitation, waste management, decontamination activities (+ 0.1%). In the production and supply of electricity and heat, gas, hot water and air conditioning, prices fell (-0.4%).

By industrial groups, the following price evolution was recorded: energy (+ 1.2%), goods for current use (+ 0.9%), production of capital goods (+ 0.5%), durable goods (+ 0.3%), intermediate goods (+ 0.1%).

In the month of the two years, 2019 and 2018, the prices of industrial production increased by 5.6%. Price increases were recorded in: the extractive industry (+ 16.1%), the production and supply of electricity and heat, gas, hot water and air conditioning (+ 15.1%), water distribution; sanitation, waste management, decontamination activities (+ 6.5%) and the processing industry (+ 3.7%).

By groups, price increases are noticeable in the energy industry (+ 13.4%), production of durable goods (+ 3.6%), consumer goods (+ 3.5%), intermediate goods (+ 3.3%), capital goods (+ 3.2%).

• **The main primary energy resources**

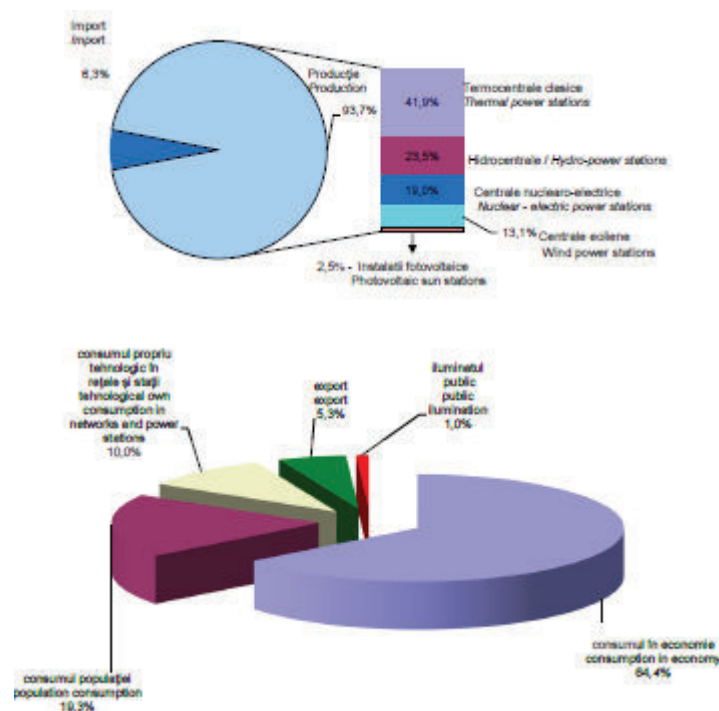
The main primary energy resources totaled 11597.5 thousand tonnes of oil equivalent (conventional fuel with a calorific value of 10,000 Kcal / Kg) (toe) in the first four months, increasing by 105.7 thousand toe compared to the same period in 2018 .

Domestic production was 6848.9 thousand toe, decreasing by 262.9 thousand toe compared to the same period of 2018. The import was 4748.6 thousand toe. Electricity resources amounted to 22316.8 million kWh, down by 1608.0 million kWh, compared to the same period in 2018.

Electricity by resources and destinations during the period 01.01. - 30.04.2019

Figure 3

total resources = 22316.8 thousand kWh



Source: National Institute of Statistics

During this period, the final consumption of electricity was 18903.2 million kWh, 1.0% lower than in the same period of 2018. The public lighting increased by 7.2%, and the population consumption increased by 14.7%. The export of electricity was 1180.3 million kWh, decreasing by 1199.3 million kWh. The own technological consumption in networks and stations was 2233.3 million kWh, decreasing by 212.5 million kWh, as compared to 2018.

• The international trade with industrial products

In the structure of FOB exports of industrial products, in March 2019, the largest share was held by motor vehicles, trailers and semi-trailers (1396.9 million euros), followed by electrical equipment (702.7 million euros), machinery, machinery and equipment (591.3 million euros), computers, electronic and optical products (421.6 million euros), metallurgical products

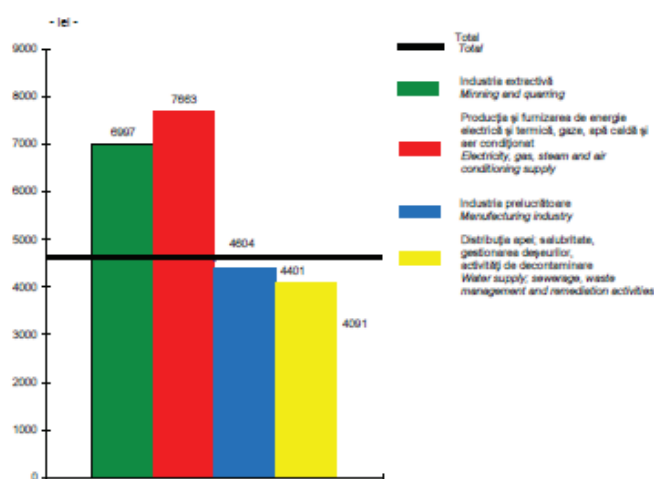
(329.3 million euros), rubber products and plastics (321.1 million euros) , clothing (223.4 million euros). In the structure of CIF imports of industrial products made in March 2019, the largest share is held by road transport vehicles, trailers and semi-trailers with a value of 855.1 million euros. Also, the import of machinery, machinery and equipment n.c.a. (719.7 million euros), chemicals and chemicals (678.8 million euros), electrical equipment (628.2 million euros), computers, electronic and optical products (617.6 million euros), metallurgical products (463.6 million) million), food (435.5 million).

• The labor market

The number of employees in the industry (from the units with 4 employees and over) was 1370200 persons in April 2019, with 5600 persons smaller than in the previous month.

Average gross earnings in the industry, in April 2019

Figure 4



Source: National Institute of Statistics

By activity areas, the processing industry has the largest number of employees (166300 people followed by water distribution; sanitation, waste management, decontamination activities (102800 people), production and supply of electricity and heat, gas, hot water and air conditioning (52400 persons) and the extractive industry (48700 persons).

Also, the gross average wage in the industry increased due to the shift of fiscal obligations from the employer to the employee, but also as a result of

increases in line with the new unitary wage law. Figure 4 shows graphically the level of gross average wage in the industry, in April 2019.

Conclusions

A number of conclusions are drawn from the presented article. Of these we mention that the rate of evolution of the industry has slowed down. Why? Due to the competitiveness in the European market and even the wider, international market. It follows that Romania does not have industry-leading branches that provide competitive quality and price products in the context of the European Union. It is concluded that a series of measures to identify industrial activity is required in the next period. Another conclusion is that industry continues to be the main source of realization of the Gross Domestic Product and, in this context, development measures are required at European level, but also at national level of some branches of industry that can become more competitive on a wider European level.

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